

Environmental Ethics and Weak Anthropocentrism

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The assumption that environmental ethics must be nonanthropocentric in order to be adequate is mistaken. There are two forms of anthropocentrism, weak and strong, and weak anthropocentrism is adequate to support an environmental ethic. Environmental ethics is, however, distinctive vis-à-vis standard British and American ethical systems because, in order to be adequate, it must be nonindividualistic. Environmental ethics involves decisions on two levels, one kind of which differs from usual decisions affecting individual fairness while the other does not. The latter, called allocational decisions, are not reducible to the former and govern the use of resources across extended time. Weak anthropocentrism provides a basis for criticizing individual, consumptive needs and can provide the basis for adjudicating between these levels, thereby providing an adequate basis for environmental ethics without the questionable ontological commitments made by nonanthropocentrists in attributing intrinsic value to nature.

I. INTRODUCTION

In two essays already published in this journal, I have argued that an environmental ethic cannot be derived, first, from rights or interests of nonhumans and, second, from rights or interests of future generations of humans.¹ Those negative conclusions pave the way for a more positive discussion of the nature and shape of environmental ethics and, in the present paper, I undertake that task. In particular, I address the question of whether there must be a distinctively environmental ethic.

Discussions of this question in the literature have equated a negative answer with the belief that the standard categories of rights, interests, and duties of

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¹ Bryan G. Norton, "Environmental Ethics and Nonhuman Rights," *Environmental Ethics* 4 (1982): 17–36, and "Environmental Ethics and the Rights of Future Generations," *Environmental Ethics* 4 (1982): 319–37.

individual human beings are adequate to furnish ethical guidance in environmental decision making. A positive answer is equated with the suggestion that nature has, in some sense, intrinsic value. In other words, the question of whether environmental ethics is distinctive is taken as equivalent to the question of whether an environmental ethic must reject anthropocentrism, the view that only humans are loci of fundamental value.² Environmental ethics is seen as distinctive vis-à-vis standard ethics if and only if environmental ethics can be founded upon principles which assert or presuppose that nonhuman natural entities have value independent of human value.

I argue that this equivalence is mistaken by showing that the anthropocentrism/nonanthropocentrism debate is far less important than is usually assumed. Once an ambiguity is noted in its central terms, it becomes clear that nonanthropocentrism is not the only adequate basis for a truly environmental ethic.³ I then argue that another dichotomy, that of individualism versus nonindividualism, should be seen as crucial to the distinctiveness of environmental ethics and that a successful environmental ethic cannot be individualistic in the way that standard contemporary ethical systems are. Finally, I examine the consequences of these conclusions for the nature and shape of an environmental ethic.

Before beginning these arguments, I need to clarify how I propose to test an adequate environmental ethic. I begin by assuming that all environmentally sensitive individuals believe that there is a set of human behaviors which do or would damage the environment. Further, I assume that there is considerable agreement among such individuals about what behaviors are included in that set. Most would decry, for example, careless storage of toxic wastes, grossly overpopulating the world with humans, wanton destruction of other species, air and water pollution, and so forth. There are other behaviors which would be more controversial, but I take the initial task of constructing an adequate environmental ethic to be the statement of some set of principles from which rules can be derived proscribing the behaviors included in the set which virtually all environmentally sensitive individuals agree are environmentally destructive. The further task of refining an environmental ethic then involves moving back and forth between the basic principles and the more or less controversial behaviors, adjusting principles and/or rejecting intuitions until the best possible fit between principles and sets of proscribed behaviors is

² See, for example, Richard Routley, "Is There a Need for a New, an Environmental Ethic?" *Proceedings of the XV World Congress of Philosophy*, vol. 1 (1973), pp. 205-10; Holmes Rolston, III, "Is There an Ecological Ethic?" *Ethics* 85 (1975): 93-109; Tom Regan, "The Nature and Possibility of an Environmental Ethic," *Environmental Ethics* 3 (1981): 19-34; and Evelyn B. Pluhar, "The Justification of an Environmental Ethic," *Environmental Ethics* 4 (1982): 319-37.

³ See Regan, "The Nature and Possibility of an Environmental Ethic," who distinguishes "an ethic of the environment" from "an ethic for the use of the environment" (p. 20), where the former, but not the latter, recognizes the intrinsic (inherent) value of nonhuman elements of nature. If the arguments of this paper are persuasive, Regan's distinction will lose interest.

obtained for the whole environmental community. In the present paper I address the prior question of basic principles. I am here only seeking to clarify which principles do (and which do not) support the large set of relatively uncontroversial cases of behaviors damaging to the environment. An ethic will be adequate, on this approach, if its principles are sufficient to entail rules proscribing the behaviors involved in the noncontroversial set. My arguments, then, are not directed at determining which principles are *true*, but which are *adequate* to uphold certain shared intuitions. Questions concerning the truth of such principles must be left for another occasion.

II. ANTHROPOCENTRISM AND NONANTHROPOCENTRISM

I suggest that the distinction between anthropocentrism and nonanthropocentrism has been given more importance in discussions of the foundations of environmental ethics than it warrants because a crucial ambiguity in the term *anthropocentrism* has gone unnoticed.⁴ Writers on both sides of the controversy apply this term to positions which treat humans as the only loci of intrinsic value.⁵ Anthropocentrists are therefore taken to believe that every instance of value originates in a contribution to human values and that all elements of nature can, at most, have value instrumental to the satisfaction of human interests.⁶ Note that anthropocentrism is defined by reference to the position taken on *loci* of value. Some nonanthropocentrists say that human beings are the *source* of all values, but that they can designate nonhuman objects as loci of fundamental value.⁷

It has also become common to explain and test views on this point by reference to "last man examples" which are formulated as follows.⁸ Assume that a human being, *S*, is the last living member of *Homo sapiens* and that

⁴ My thoughts on this subject have been deeply affected by discussions of the work of Donald Regan and J. Baird Callicott. See, Donald Regan, "Duties of Preservation," and J. Baird Callicott, "On the Intrinsic Value of Nonhuman Species," in *The Preservation of Species*, edited by Bryan G. Norton (in preparation).

⁵ I borrow this phrase from Donald Scherer, "Anthropocentrism, Atomism, and Environmental Ethics," *Environmental Ethics* 4 (1982): 115-23.

⁶ I take anthropocentrism to be interchangeable with homocentrism. See R. and V. Routley, "Against the Inevitability of Human Chauvinism," in *Ethics and Problems of the 21st Century*, edited by K.E. Goodpaster and K.M. Sayre (Notre Dame, Ind.: University of Notre Dame Press, 1979), pp. 56-7. Routley and Routley show that "human chauvinism" (anthropocentrism, homocentrism) are equivalent to the thesis of man's "dominion," which they describe as "the view that the earth and all its nonhuman contents exist or are available for man's benefit and to serve his interests."

⁷ See J. Baird Callicott, "On the Intrinsic Value of Nonhuman Species," in Norton, *The Preservation of Species* (in preparation), and Pluhar, "The Justification of an Environmental Ethic."

⁸ See, for example, Richard Routley, "Is There a Need for a New, an Environmental, Ethic?" p. 207; Routley and Routley, "Human Chauvinism and Environmental Ethics," in *Environmental Philosophy*, edited by D.S. Mannison, M.A. McRobbie and R. Routley (Canberra: Australian National University, Department of Philosophy, 1980), p. 121; and Donald Regan, "Duties of Preservation," in Norton, *The Preservation of Species*.

S faces imminent death. Would *S* do wrong to wantonly destroy some object *X*? A positive answer to this question with regard to any nonhuman *X* is taken to entail nonanthropocentrism. If the variable *X* refers to some natural object, a species, an ecosystem, a geological formation, etc., then it is thought that positions on such questions determine whether a person is an anthropocentrist or not, because the action in question cannot conceivably harm any human individual. If it is wrong to destroy *X*, the wrongness must derive from harm to *X* or to some other natural object. But one can harm something only if it is a good in its own right in the sense of being a locus of fundamental value.

Or so the story goes. I am unconvinced because not nearly enough has been said about what counts as a human interest. In order to explore this difficult area, I introduce two useful definitions. A *felt preference* is any desire or need of a human individual that can at least temporarily be sated by some specifiable experience of that individual. A *considered preference* is any desire or need that a human individual would express after careful deliberation, including a judgment that the desire or need is consistent with a rationally adopted world view—a world view which includes fully supported scientific theories and a metaphysical framework interpreting those theories, as well as a set of rationally supported aesthetic and moral ideals.

When interests are assumed to be constructed merely from felt preferences, they are thereby insulated from any criticism or objection. Economic approaches to decision making often adopt this approach because it eschews “value judgments”—decision makers need only ask people what they want, perhaps correct these preferences for intensity, compute the preferences satisfied by the various possible courses of action, and let the resulting ordinal ranking imply a decision.

A considered preference, on the other hand, is an idealization in the sense that it can only be adopted after a person has rationally accepted an entire world view and, further, has succeeded in altering his felt preferences so that they are consonant with that world view. Since this is a process no one has ever completed, references to considered preferences are hypothetical—they refer to preferences the individual would have if certain contrary-to-fact conditions were fulfilled. Nonetheless, references to considered preferences remain useful because it is possible to distinguish felt preferences from considered preferences when there are convincing arguments that felt preferences are not consistent with some element of a world view that appears worthy of rational support.

It is now possible to define two forms of anthropocentrism. A value theory is *strongly anthropocentric* if all value countenanced by it is explained by reference to satisfactions of felt preferences of human individuals. A value theory is *weakly anthropocentric* if all value countenanced by it is explained by reference to satisfaction of some felt preference of a human individual or by reference to its bearing upon the ideals which exist as elements in a world view essential to determinations of considered preferences.

Strong anthropocentrism, as here defined, takes unquestioned felt preferences of human individuals as determining value. Consequently, if humans have a strongly consumptive value system, then their "interests" (which are taken merely to be their felt preferences) dictate that nature will be used in an exploitative manner. Since there is no check upon the felt preferences of individuals in the value system of strong anthropocentrism, there exists no means to criticize the behavior of individuals who use nature merely as a storehouse of raw materials to be extracted and used for products serving human preferences.

Weak anthropocentrism, on the other hand, recognizes that felt preferences can be either rational or not (in the sense that they can be judged not consonant with a rational world view). Hence, weak anthropocentrism provides a basis for criticism of value systems which are purely exploitative of nature. In this way, weak anthropocentrism makes available two ethical resources of crucial importance to environmentalists. First, to the extent that environmental ethicists can make a case for a world view that emphasizes the close relationship between the human species and other living species, they can also make a case for ideals of human behavior extolling harmony with nature. These ideals are then available as a basis for criticizing preferences that merely exploit nature.

Second, weak anthropocentrism as here defined also places value on human experiences that provide the basis for value formation. Because weak anthropocentrism places value not only on felt preferences, but also on the process of value formation embodied in the criticism and replacement of felt preferences with more rational ones, it makes possible appeals to the value of experiences of natural objects and undisturbed places in human value formation. To the extent that environmentalists can show that values are formed and informed by contact with nature, nature takes on value as a teacher of human values. Nature need no longer be seen as a mere satisfier of fixed and often consumptive values—it also becomes an important source of inspiration in value formation.⁹

In the final section of this paper I develop these two sources of value in nature more fully. Even there my goal is not to defend these two bases for environmental protection as embodying true claims about the value of nature—that, as I said at the outset is a larger and later task. My point is only that, within the limits set by weak anthropocentrism as here defined, there exists a framework for developing powerful reasons for protecting nature. Further, these reasons do not resemble the extractive and exploitative reasons normally associated with strong anthropocentrism.

⁹ For fuller discussions of this point, see Mark Sagoff, "On Preserving the Natural Environment," *Yale Law Journal* 84 (1974): 205–67; Holmes Rolston, III, "Can and Ought We to Follow Nature?" *Environmental Ethics* 1 (1979): 7–21; and Bryan G. Norton, *The Spice of Life* (in preparation).

And they do not differ from strongly anthropocentric reasons in merely theoretical ways. Weakly anthropocentric reasoning can affect behavior as can be seen by applying it to last man situations. Suppose that human beings choose, for rational or religious reasons, to live according to an ideal of maximum harmony with nature. Suppose also that this ideal is taken seriously and that anyone who impairs that harmony (by destroying another species, by polluting air and water, etc.) would be judged harshly. But such an ideal need not attribute intrinsic value to natural objects, nor need the prohibitions implied by it be justified with nonanthropocentric reasoning attributing intrinsic value to nonhuman natural objects. Rather, they can be justified as being implied by the ideal of harmony with nature. This ideal, in turn, can be justified either on religious grounds referring to human spiritual development or as being a fitting part of a rationally defensible world view.

Indeed, there exist examples of well developed world views that exhibit these characteristics. The Hindus and Jains, in proscribing the killing of insects, etc., show concern for their own spiritual development rather than for the actual lives of those insects. Likewise, Henry David Thoreau is careful not to attribute independent, intrinsic value to nature. Rather he believes that nature expresses a deeper spiritual reality and that humans can learn spiritual values from it.¹⁰ Nor should it be inferred that only spiritually oriented positions can uphold weakly anthropocentric reasons. In a post-Darwinian world, one could give rational and scientific support for a world view that includes ideals of living in harmony with nature, but which involve no attributions of intrinsic value to nature.

Views such as those just described are weakly anthropocentric because they refer only to human values, but they are not strongly so because human behavior is limited by concerns other than those derivable from prohibitions against interfering with the satisfaction of human felt preferences. And practically speaking, the difference in behavior between strong anthropocentrists and weak anthropocentrists of the sort just described and exemplified is very great. In particular, the reaction of these weak anthropocentrists to last man situations is undoubtedly more similar to that of nonanthropocentrists than to that of strong anthropocentrists. Ideals such as that of living in harmony with nature imply rules proscribing the wanton destruction of other species or ecosystems even if the human species faces imminent extinction.

But it might be objected that positions such as those here sketched only appear to avoid attributions of intrinsic value to nature and natural objects. For example, Tom Regan has argued that a position similar to them makes covert appeal to the intrinsic value of nonhuman objects and hence fails to

¹⁰ See Henry David Thoreau, *Walden* (New York: Harper and Row, 1958). Note page 64, for example, where Thoreau writes: "One value of even the smallest well is, that when you look into it you see that earth is not continent but insular. This is as important as that it keeps butter cool."

embody a purely anthropocentric argument for the preservation of nature. He writes:

If we are told that treating the environment in certain ways offends against an ideal of human conduct, we are not being given a position that is an alternative to, or inconsistent with, the view that nonconscious objects have a value of their own. The fatal objection which the offense against an ideal argument encounters, is that, rather than offering an alternative to the view that some nonconscious objects have inherent value, it presupposes that they do.¹¹

Prior to this conclusion, Regan states three propositions which are intended to support it:

The fitting way to act in regard to *X* clearly involves a commitment to regarding *X* as having value. . . . An ideal which enjoins us not to act toward *X* in a certain way but which denies that *X* has any value is either unintelligible or pointless. Ideals, in short, involve the recognition of the value of *that toward which* one acts.¹²

Regan's three propositions, however, are either false or they fail to support his conclusion. If the value they refer to is inclusive of intrinsic and instrumental value, the propositions are true but do not support the conclusion that all ideals of human conduct imply intrinsic value of the object protected by the ideal. Ideals regarding the treatment of my neighbor's horse (viewed as a piece of private property) imply only that the horse has instrumental, not intrinsic, value. If, on the other hand, Regan intends the references to value in the three propositions to refer to *intrinsic* value exclusively, then all three propositions are clearly false. I can accept that there is a fitting way to act in regard to my neighbor's horse, without thereby accepting any commitment to accord intrinsic value to it. Nor am I thereby committed to anything either unintelligible or pointless. I need not recognize the intrinsic value of the horse; I can, alternatively, recognize the intrinsic value of my neighbor and her preference that the horse not be harmed.

The example of the horse provides a counterexample to Regan's argument, thereby showing that the argument is unsound. It does so, admittedly, by appealing to the instrumental value of the horse for human preference satisfaction. It does not, therefore, directly address the question of whether there are ideals of environmental protection supportable on weakly anthropocentric grounds, but which imply no intrinsic value for the protected objects. The examples mentioned earlier, however, fulfill this function. If the Hindu, the Jainist, or the follower of Thoreau appeals to ideals designed to improve hu-

¹¹ Regan, "The Nature and Possibility of an Environmental Ethic," pp. 25-26. It involves no distortion, I think, to equate Regan's use of *inherent* with mine of *intrinsic*.

¹² *Ibid.*, p. 25.

mans spiritually, then they can justify those ideals without attributing intrinsic value to the objects protected. Nor are the spiritual aspects of these examples essential. If ideals of human behavior are justified as fitting parts of a world view which can be rationally supported from a human perspective, then these ideals, too, escape Regan's argument—they might support protection of nature as a fitting thing for humans to strive toward, without attributing intrinsic value to nature.

Nor need weak anthropocentrism collapse into strong anthropocentrism. It would do so if the dichotomy between preferences and ideals were indefensible. If all values can, ultimately, be interpreted as satisfactions of preferences, then ideals are simply human preferences. The controversy here is reminiscent of that discussed by early utilitarians. John Stuart Mill, for example, argued that because higher pleasures ultimately can be seen to provide greater satisfactions, there is thus only a single scale of values—preference satisfaction.¹³ It is true that weak anthropocentrists must deny that preference satisfaction is the only measure of human value. They must take human ideals seriously enough so that they can be set against preference satisfactions as a limit upon them. It is therefore no surprise that weak anthropocentrists reject the reductionistic position popular among utilitarians. Indeed, it is precisely the rejection of that reductionism that allows them to steer their way between strong anthropocentrism and nonanthropocentrism. The rejection of this reduction is, of course, a commitment that weak anthropocentrists share with nonanthropocentrists. Both believe there are values distinct from human preference satisfaction, rejecting the reduction of ideals to preferences. They differ not on this point, but on whether the justification of those ideals must appeal to the intrinsic value of nonhuman objects.

Weak anthropocentrism is, therefore, an attractive position for environmentalists. It requires no radical, difficult-to-justify claims about the intrinsic value of nonhuman objects and, at the same time, it provides a framework for stating obligations that goes beyond concern for satisfying human preferences. It, rather, allows the development of arguments to the effect that current, largely consumptive attitudes toward nature are indefensible, because they do not fit into a world view that is rationally defensible in terms not implying intrinsic value for nonhumans. It can also emphasize the value of nature in forming, rather than in satisfying human preferences, as preferences can be modified in the process of striving toward a consistent and rationally defensible world view.

III. INDIVIDUALISM AND NONINDIVIDUALISM

The distinctions and arguments presented above convince me that, while the development of a nonanthropocentric axiology committed to intrinsic value for nonhuman natural entities remains an interesting philosophical enterprise,

¹³ John Stuart Mill, *Utilitarianism*, chap. 2.

the dichotomy on which it is based has less importance for the nature of environmental ethics than is usually thought. In particular, I see no reason to think that, if environmental ethics is distinctive, its distinctiveness derives from the necessity of appeals to the intrinsic value of nonhuman natural objects. Once two forms of anthropocentrism are distinguished, it appears that from one, weak anthropocentrism, an adequate environmental ethic can be derived. If that is true, authors who equate the question of the distinctiveness of an adequate environmental ethic with the claim that nature or natural objects have intrinsic value are mistaken.

There is, nevertheless, reason to believe that an adequate environmental ethic is distinctive. In this section, I argue that no successful environmental ethic can be derived from an individualistic basis, whether the individuals in question are human or nonhuman. Since most contemporary ethical systems are essentially individualistic, an adequate environmental ethic is distinctive, not by being necessarily nonanthropocentric as many environmental ethicists have argued or assumed, but, rather, by being nonindividualistic.

Standard contemporary ethical theories, at least in the United States and Western Europe are essentially individualistic. By this I mean that the behavioral prohibitions embodied in them derive from the principle that actions ought not to harm other individuals unjustifiably. Utilitarians derive ethical rules from the general principle that all actions should promote the greatest possible happiness for the greatest possible number of individuals. This means that actions (or rules) are judged to be legitimate or not according to whether more good (and less harm) for individuals will result from the action than from any alternative. On this view, the satisfaction of each individual interest is afforded an initial *prima facie* value. Some such interests are not to be satisfied because the information available indicates that if they are, some greater interest or sets of interests of some individuals cannot be satisfied concurrently with them. The utilitarian principle, supplemented by empirical predictions about the consequences of actions for individuals, filters happiness-maximizing actions from others that do not maximize happiness. For present purposes, the important point is that the satisfaction of individual interests are the basic unit of value for utilitarians, and in this sense, utilitarianism (either of the act or rule variety) is essentially individualistic.¹⁴

Contemporary deontologists derive ethical prohibitions from individual rights and obligations to protect those rights.¹⁵ Individuals make claims, and

¹⁴ I do not intend to imply here that utilitarians are limited to treating human interests as felt preferences. Utilitarians adopt varied interpretations of interests in relation to happiness. My point is only that human individual interests, however determined, are the basis of their moral calculus.

¹⁵ I qualify the position here discussed as "contemporary" deontology because there is a strain of thought in Kant which emphasizes that the imperatives are abstract principles. Modern neo-Kantians such as Rawls, however, emphasize the more individualistic strains in Kant, placing him more in the contractarian tradition. Contractarian deontologists—those that fit clearly into the liberal tradition—are my concern here. (I am indebted to Douglas Berggren for clarifying this point.)

when these claims conflict with claims made by other individuals, they are judged to be legitimate or illegitimate according to a set of ethical rules designed to make such decisions. Although these rules, in essence, are the embodiment of a system of justice and fairness, the rules adjudicate between claims of individuals, and consequently modern deontology is essentially individualistic.¹⁶ Therefore, both utilitarianism and modern deontology are essentially individualistic in the sense that the basic units of ethical concern are interests or claims of individuals.

It is characteristic of the rules of environmental ethics that they must prohibit current behaviors that have effects upon the long-range future as well as the present. For example, storage of radioactive wastes with a half-life of thousands of years in containers that will deteriorate in a few centuries must be prohibited by an adequate environmental ethic, even if such actions, on the whole, provide the most benefits and no harms to currently living individuals. Likewise, human demographic growth, if subsequent generations continue that policy, will create severe overpopulation, a behavior negatively affecting the future of the environment, and hence human reproductive behavior must be governed by an adequate environmental ethic. An adequate environmental ethic must therefore prohibit current activities generally agreed to have negative effects on the environment of the future.

I have argued at length elsewhere that a paradox, due to Derek Parfit, effectively precludes systems of ethics which are individualistic in the sense defined above from governing current decisions by reference to their effects on future individuals.¹⁷ To summarize that argument briefly, it exploits the insight that no system of ethics built exclusively upon adjudications of interests of present and future individuals can govern current decisions and their effects on future individuals because current environmental decisions determine what individuals will exist in the future. Parfit's argument notes that current decisions regarding consumption determine how many individuals and which individuals will be born in the future. On a policy of fast demographic growth and high consumption, different individuals will exist a century from now than would exist if the current generation adopts a policy of low growth and moderate consumption. Assume, as most environmentalists do, that a policy of high growth and immoderate consumption will leave the future with a lower quality of life than more moderate growth policies would. The individuals who

¹⁶ For a clear explanation of how rights function to adjudicate individual claims, see Joel Feinberg, "The Nature and Value of Rights," *Journal of Value Inquiry* 4 (1970): 243-57. While not all writers agree that rights originate in claims, the disputes are immaterial here. For example, McCloskey's linkage of rights to "entitlements" is not inconsistent with my point. H. J. McCloskey, "Rights," *Philosophical Quarterly* 15 (1965): 115-27.

¹⁷ See, "Energy and the Further Future," in *Energy and the Future*, edited by Douglas MacLean and Peter G. Brown (Totowa, N.J.: Rowman and Littlefield, 1983). I apply Parfit's "paradox" to environmental ethics in "Environmental Ethics and the Rights of Future Generations," *Environmental Ethics* 4 (1982): 321. See that essay for a more detailed discussion.

are, in fact, born as a result of the immoderate growth policies cannot complain that they would have been better off had the policies been different—for they would not even have existed had moderate policies been adopted. That is, Parfit's paradox shows that current policy cannot be governed by reference to harms to the interests of future individuals, because those policies determine who those individuals will be and what interests they will have. Attempts to govern behaviors affecting the distant future cannot, therefore, be governed by appeal to individual interests of future persons, since the very existence of such individuals hangs in the balance until all relevant decisions are made.

Since the ethical intuitions shared by all environmentally sensitive individuals include prohibitions against behaviors which may have negative effects only in the long-term future (and not in the present), the rules of environmental ethics cannot be derived from the usual, individualistic systems of ethics currently in vogue. Note, also, that my argument concerning individualism makes no assumption that only human individuals make claims or have interests and rights. Future nonhuman individuals are, likewise, affected by human policies regarding consumption and reproduction. Consequently, expansion of the loss of individual rights holders, or preference havens to include nonhumans in no way affects the argument. No ethical system which is essentially individualistic, regardless of how broadly the reference category of individuals is construed, can offer ethical guidance concerning current environmental policy in all cases.

IV. A PROPOSAL FOR AN ADEQUATE ANTHROPOCENTRIC ENVIRONMENTAL ETHIC

The arguments of the last section are surprisingly simple and general, but if they are sound, they explain the fairly general intuition that environmental ethics must be distinctive in some sense, although not in the sense usually assumed. So far my conclusions have all been negative—I have argued that an adequate environmental ethic *need not* be nonanthropocentric and that an adequate environmental ethic *must not* be limited to considerations of individual interests. From these conclusions a new direction for environmental ethics emerges which is weakly anthropocentric—it finds all value in human loci—and which is also nonindividualistic in the sense that value is not restricted to satisfactions of felt preferences of human individuals. In other words, the arguments of the first two sections of the paper (1) positively define a space by establishing the possibility of a weakly, but not strongly, anthropocentric environmental ethic and (2) negatively constrain that ethic by eliminating the possibility that it be purely individualistic.

My purpose now is not to demonstrate that the ethical principles I have set out are definitely correct or that they are the only adequate principles available. My goal, rather, is to present a valid alternative for environmental ethics that

is adequate in a manner that no purely individualistic, strongly anthropocentric ethic can be, while avoiding difficult-to-defend references to the intrinsic value of nonhuman natural objects.

I begin my explication with an analogy. Suppose an extremely wealthy individual, through a will, sets up a very large trust fund "to be managed for the economic well-being of my descendants." Over the years, descendants will be born and die, and the class of beneficiaries will change through time. Suppose, also, that the family drifts apart emotionally and becomes highly contentious. I suggest that two sorts of controversies, each with its own distinctive logic, could arise concerning the fund. First, there may be issues about the *fair distribution* of proceeds of the trust. Some descendants might claim that other descendants are not entitled to full shares, because they are, or are descended from, an illegitimate offspring of a member of the family. Or it might be disputed whether adopted children of descendants are included in the terms of the will.

Second, there may well be disputes about the *management* of the trust. Here, there may be questions concerning what sorts of investments are "good investments." Should all investments be safe ones, thereby insuring a continued, although smaller income? Might the principle of the trust be invaded in years where the income from investments is unusually low? Might one generation simply spend the principle, dividing it fairly among themselves, showing no concern for future descendants?

To apply this analogy in obvious ways, ethical questions about the environment can be divided into ones concerning distributional fairness within generations and others concerning longer-term, cross-generational issues. If the arguments in the third section are correct, then the latter are not reducible to the former; nor do they have the same logic. It can be assumed that many environmental concerns, as well as nonenvironmental ones, can be resolved as issues of distributional fairness. If a property owner pollutes a stream running through his property, this action raises a question of fairness between him and his downstream neighbors.¹⁸ These moral issues are, presumably, as amenable to resolution using the categories and rules of standard, individualistic ethics as are nonenvironmental ones.

But there are also many questions in environmental ethics that are analogous to questions of management of a trust across time. Soil, water, forests, coal, oil, etc. are analogous to the principle of the trust. If they are used up, destroyed, or degraded, they no longer provide benefits. The income from the trust provides an analogy for renewable resources. As long as the productive resource (analogous to the principle of the trust) is intact, one can expect a steady flow of benefits.

¹⁸ This is not to suggest, of course, that such action could not also have more long-term effects raising issues of the second sort as well.

One feature that makes environmental ethics distinctive is concern for protection of the resource base through indefinite time. Parfit's paradox shows that these concerns cannot be accounted for by reference to concerns for individuals and to the obligation not to harm other individuals unjustifiably. The obligations are analogous to those accepted by an individual who is appointed executor of the trust fund. Although decisions made by the executor affect individuals and their well-being, the obligation is to the integrity of the trust, not to those individuals. While one might be tempted to say that the obligation of the executor is to future individuals who will be born, but who are at this time unknown, this conceptualization also involves a failure to perceive the profundity of Parfit's paradox. Suppose all of the members of a given generation of the family in question sign an agreement not to have offspring and thereby convince the executor to disburse the principle of the trust equally among current beneficiaries. Perhaps this is consistent with the terms of the trust, but it shows that the current choices of the executor cannot be guided by abstract conceptions of "future individuals." When current decisions about management are interlocked with not-yet-decided questions affecting the future existence of individuals, it is impossible to refer to those individuals as the basis of guidance in making current management decisions.

Suppose a generation of the entire human species freely decided to sterilize itself, thereby freeing itself to consume without fear of harming future individuals. Would they do wrong? Yes.¹⁹ The perpetuation of the human species is a good thing because a universe containing human consciousness is preferable to one without it.²⁰ This value claim implies that current generations must show concern for future generations. They must take steps to avoid the extinction of the species and they must provide a reasonably stable resource base so that future generations will not suffer great deprivation. These are the bases of rules of management analogous to the rules for administering a trust fund. They do not have individuals or individual interests as their reference point, but they do govern behavior that will affect future individuals.

It is now possible to outline a weakly anthropocentric, nonindividualistic environmental ethic. Such an ethic has two levels. The distributional level has

¹⁹ This answer implies a disanalogy with the trust fund situation, provided one accepts the judgment that no wrong would be committed if a generation of the family chose not to reproduce. I think there is a disanalogy here, as different reproductive obligations would arise if the future of the human species were at stake. Suppose one answers this question negatively regarding the future of human kind and then considers the possibility that the last human individual might wantonly destroy other species, natural places, etc. I would still reject such wanton acts as inconsistent with good human behavior, relying upon weakly anthropocentric arguments as described above.

²⁰ I willingly accept the implication of this value claim that, in a situation of severely contracting human population, some or all individuals would have an obligation to reproduce, but I will not defend this central claim here. Although I believe it can be defended, I am more interested in integrating it into a coherent ethical system than in defending it.

as its principle that one ought not to harm other human individuals unjustifiably. This principle rests upon the assumption that felt preferences, desires that occur within individual human consciousness, have equal *prima facie* value. Rules for the fair treatment of individuals are derived from the principle of no harm and prescribe fair treatment of individuals, whether regarding benefits derived from the environment or from other sources. Since there is nothing distinctive about the environmental prescriptions and proscriptions that occur on this level—they do not differ in nature from other issues of individual fairness—I do not discuss them further.

Decisions on the second level of environmental ethics, which I call the level of "allocation," cannot, however, be based upon individual considerations. The central value placed on human consciousness is not a result of aggregating the value of individual consciousnesses, because the value of ongoing consciousness cannot be derived from the value of individual consciousnesses—they cannot be identified or counted prior to the making of decisions on resource allocation.²¹ Therefore, obligations on this level are owed to no individual and can be called "generalized obligations." They are obligations of the current generation to maintain a stable flow of resources into the indefinite future and, consequently, they are stated *vis-à-vis* resources necessary for ongoing human life, not *vis-à-vis* individual requirements. Resources represent the means for supporting life looked at from a nonindividual perspective. The individual perspective determines needs and wants and then seeks means to fulfill them. Concern for the continued flow of resources insures that sources of goods and services such as ecosystems, soil, forests, etc. remain "healthy" and are not deteriorating. In this way, options are held open and reasonable needs of individuals for whatever goods and services can be fulfilled with reasonable labor, technology, and ingenuity. The emphasis of this concern, however, is not individualistic since it is not focused on the fulfillment of specifiable needs, but rather on the integrity and health of ongoing ecosystems as holistic entities.

While the long-term nature of the concern implies that the stability of the resource base must be protected, this stability is not the same thing as ecological stability. It is an open (and controversial) question as to what the stability of ecosystems means. Further, there are controversies concerning the extent to which there are scientifically supportable generalizations about what is necessary to protect ecological stability. For example, it is highly controversial whether diversity, in general, promotes and/or is necessary for ecological stability.²² These controversies are too complex to enter into here, but they are relevant. To the extent that scientists know what is necessary to protect the

²¹ On a closely related point, see Brian Barry, "Circumstances of Justice and Future Generations," in Sikora and Barry, eds. *Obligations to Future Generations* (Philadelphia: Temple University Press, 1978).

²² See Norton, *The Spice of Life*.

resource base, there is an obligation to act upon it. Even if there are few sweeping generalizations such as those concerning diversity and stability, there are a wide variety of less general rules that are well supported and are being systematically ignored in environmental policy. Ecologists and resource managers know that clear-cutting tropical forests on steep slopes causes disastrous erosion, that intensely tilling monocultures causes loss of topsoil, and that overexploitation of fisheries can cause new and far less productive species compositions. Further, there is an obligation, where knowledge is lacking, to seek that knowledge in order to avoid unintentional destruction.

An ethic of resource allocation should apply to nonrenewable resources as well as to renewable ones and should also imply a population policy. The general injunction to maintain the stability of the resource base across generations follows from the value of human consciousness. It implies that, with respect to renewable, or interest-bearing resources, present generations should not harvest more than the maximum sustainable yield of the resource. But what does stability imply with respect to nonrenewable resources? Although at first glance it would seem to suggest that a stable supply can only be sustained if no utilization takes place, this reasoning is based on a confusion—it is not the case that there is an obligation to have a certain, fixed amount of goods in supply, but rather there is an obligation to maintain a stable level of goods *available for use*. The ethical principle, in other words, is directed at maintaining the possibility of human consciousness which requires resource use. What is required, then, is a constant supply of resources available for utilization by succeeding generations. Once the problem is framed in this manner, human technology and the phenomenon of substitutability of products become relevant. Present humans may use up nonrenewable resources, provided they take steps to provide suitable substitutes. If, for example, the present generation uses up a major portion of the accumulated fossil fuels available, they will have done nothing wrong if they leave the next generation with a technology capable of deriving energy from renewable sources such as the sun, wind, or ocean currents.²³ There are significant trade-offs available back and forth between renewable and nonrenewable resources.

Note also that this system implies a population principle—the level of population in any given generation should be determined by the requirements for the stability of the resource flow. Such a determination would be based on an assessment of (a) how many people are consistent with the maximal sustainable yield of renewable resources and (b) how many people are consistent with a level of use for nonrenewable resources which does not outstrip the ability of the existing technology to produce suitable substitutes. A population principle follows, in turn, from this stability principle. One need not identify future

²³ I am, for the sake of the example, ignoring other long-term effects of the use of fossil fuels. Problems due to the greenhouse effect would, of course, also have to be solved.

individuals or worry about utilities of possible individuals on this approach. The obligation is to maintain maximum sustainable yield consistent with the stability of the resource flow. The population principle sets a population policy for a generation as a whole based on the carrying capacity of the environment. Questions about who, in a given generation, should have children and how many each individual can have, may be treated as questions of interpersonal equity among the existing individuals of any given generation.

The ethical obligations constituting an ethic of allocation are quite simple as they derive from a single value—that of ongoing human consciousness. In general form, however, they do not state specifically what to do; they only require actions necessary to retain a stable resource base through indefinite time. Scientific knowledge can, in principle, nevertheless, indicate specific actions necessary in order to fulfill that obligation. Scientific evidence is sufficient to imply that many currently widespread practices violate those obligations either directly or cumulatively and are, in terms of this system, immoral. There are also areas where scientific knowledge is insufficient to decide whether and how certain practices are destructive. Here, the obligation is to be cautious and to proceed to obtain the information necessary.

While science plays a crucial role in this system, the system is not naturalistic. It does not derive moral obligations from purely scientific statements. Central to all obligations of present individuals to the future is an obligation to perpetuate the value of human consciousness. Science elucidates and makes concrete the specific obligations flowing from that central obligation but does not support it.

V. RELATING THE TWO LEVELS

The ethic proposed has two levels—one has the *prima facie* equality of felt preferences of individual humans as its central value principle; the other has the value of ongoing human life and consciousness as its central value principle. Rules and behaviors justified on these two levels can, of course, conflict. If felt preferences are overly consumptive, then the future of human life may be threatened. Conversely, one can imagine situations where concern for the future of the human species might lead to draconian measures threatening the life or livelihood of current individuals by limiting the satisfaction of felt preferences. Weak anthropocentrism, nevertheless, because it recognizes the important difference between felt and considered preferences, can adjudicate these disputes.

The most common conflict, the one many environmentalists fear we now face, exists when overly consumptive felt preferences cause serious overexploitation of nature and thereby threaten the resource base necessary for continued human life. This conflict can be resolved by taking human ideals into consideration. If, for example, one's total world view contains as an ideal the continua-

tion of human life and consciousness, then the felt preferences in question are irrational—they are inconsistent with an important ethical ideal. Similarly, if a rational world view recognizing that the human species evolved from other life forms includes an ideal calling for harmony with nature, this ideal, likewise, can function to criticize and alter felt preferences. By building ecological principles and ideals regarding the proper human treatment of nature into a rationally supported world view, weak anthropocentrists can develop vast resources for criticizing felt preferences of human individuals which threaten environmental stability and harmony.

It can be argued that experiences of nature are essential in constructing a rational world view. Likewise, scientific understanding of nature seems essential for the construction of such a world view. Nor would it be very surprising if it turned out that analogies, symbols, and metaphors drawn from nature provided an essential source of guidance in choosing ethical and aesthetic ideals as well.²⁴ Other species and unspoiled places would thereby have great value to humans not only for the way in which they satisfy human felt preferences, but also for the way they serve to enlighten those preferences. Once one recognizes the distinction between felt preferences and considered preferences, nature assumes a crucial role in informing values by contributing to the formation of a rational world view, the criterion by which felt preferences are criticized.

VI. ENVIRONMENTAL ETHICS AND INTRINSIC VALUE

The conflicts that exist between the levels of distributive fairness and allocation require thoughtful discussion and debate, but that discussion and debate can take place without appeal to the intrinsic value of nonhuman natural objects. The value of ongoing human consciousness and the rules it implies for resource allocation can serve as a basis for criticism of consumptive and exploitative felt preferences. Further, ideas such as that of human harmony with nature and the human species' evolutionary affinity to other species, can serve to strengthen and add flesh to the world view available for the critique of current environmentally destructive behaviors.

When I refer to an environmental ethic, then, I refer, first of all, to the rules of distributive fairness guiding behaviors affecting other human beings' use of the environment. Second, I refer to the rules of allocation affecting the long-term health of the biosphere as a functioning, organic unit. An environmental ethic, nevertheless, is more than these rules: it also encompasses the ideals, values, and principles that constitute a rational world view regarding the human species' relationship to nature. In these sources are bases for evaluating the rules of right action and for criticizing currently felt preferences. Aesthetic

²⁴ See references in note 9 above.

experience of nature is an essential part of the process of forming and applying these ideals and, hence, is also a central part of the environmental ethic here described.

Some nonanthropocentrists, such as J. Baird Callicott, have developed in more detail such ideas as the human affinity to other species and have concluded that it is rational for humans to "attribute" intrinsic value to other species on the basis of affective feelings toward them,²⁵ but if, as I have argued, a sense of harmony with nature can, once it becomes an entrenched part of our world view, serve to correct felt preferences, then it can also serve to bring felt preferences more in line with the requirements of resource allocation without any talk about intrinsic value. Of course, since human beings, as highly evolved animals, share many needs for clean air, clean water, ecosystem services, etc., in the long term with other species it would not be surprising that *speaking as if* nature has intrinsic value could provide useful guidance in adjusting human felt preferences. And since these preferences are now far too exploitative and too consumptive for the good of our own species, showing concern for other species that share our long-term needs for survival might be one useful tool in a very large kit.

The point of this essay, however, has been to show that one need not make the questionable ontological commitments involved in attributing intrinsic value to nature, since weak anthropocentrism provides a framework adequate to criticize current destructive practices to incorporate concepts of human affinity to nature, and to account for the distinctive nature of environmental ethics. All of these are essential elements in an ethic that recognizes the distinction between felt and considered preferences and includes important aesthetic and ethical ideals. These ideals, which can be derived from spiritual sources or from a rationally constructed world view, can be based on and find their locus in human values. And yet they are sufficient to provide the basis of criticism of currently overconsumptive felt preferences. As such they adjudicate between ethical concerns for distributional fairness in the present and concerns of allocation which have reference to the long-term future. Essential to this adjudication is the development of principles of conduct that respect the ongoing integrity of functioning ecosystems seen as wholes. In this way they transcend concern for individualistically expressed felt preferences and focus attention on the stable functioning of ongoing systems. If all of this is true, Occam's razor surely provides a basis for favoring weak anthropocentrism over nonanthropocentrism.

²⁵ Callicott, "On the Intrinsic Value of Nonhuman Species." Also see Pluhar, "The Justification of an Environmental Ethic" for a somewhat different approach to attribution of intrinsic value.